



August 26, 2021

Andy Warnick
Rosemont Copper Company
5255 East Williams Circle, Suite W1065
Tucson, AZ 85711

TEL (520) 400-0085
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RE: Baseline Stormwater Monitoring

Work Order No.: 21H0316
Order Name: Baseline Stormwater
Monitoring

Dear Andy Warnick,

Turner Laboratories, Inc. received 4 sample(s) on 08/10/2021 for the analyses presented in the following report.

All results are intended to be considered in their entirety, and Turner Laboratories, Inc. is not responsible for use of less than the complete report. Results apply only to the samples analyzed. Samples will be disposed of 30 days after issue of our report unless special arrangements are made.

The pages that follow may contain sensitive, privileged or confidential information intended solely for the addressee named above. If you receive this message and are not the agent or employee of the addressee, this communication has been sent in error. Please do not disseminate or copy any of the attached and notify the sender immediately by telephone. Please also return the attached sheet(s) to the sender by mail.

Please call if you have any questions.

Respectfully submitted,

Turner Laboratories, Inc.
ADHS License AZ0066

Elizabeth Kasik
Laboratory Director

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Date Received: 08/10/2021

Order: Baseline Stormwater Monitoring

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date/Time
21H0316-01	D4B-LB	Storm Water	08/08/2021 2106
21H0316-02	TTB-3	Storm Water	08/08/2021 2106
21H0316-03	TTB-L	Storm Water	08/08/2021 2106
21H0316-04	TTA3	Storm Water	08/08/2021 2106

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Date Received: 08/10/2021

Case Narrative

The Silica Dissolved analysis was not reported for TTB-3 and TTB-L due to matrix interference.

The Alkalinity and Ion Balance was not reported for TTB-L due to matrix interference. The pH was less than 4.5.

- E Value is above quantitation range.
 - E4 Concentration estimated. Analyte was detected below laboratory Minimum Reporting Limit (MRL) but above MDL.
 - E8 Analyte reported to MDL per project specification. Target analyte was not detected in the sample.
 - H3 Sample was received and/or analysis requested past holding time.
 - H5 This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
 - M2 Matrix spike recovery was low; the associated LCS/LCSD was acceptable.
 - M3 The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated LCS/LCSD recovery was acceptable.
 - M6 Matrix spike recovery was high. Data reported per ADEQ policy 0154.000. Matrix interference was confirmed.
 - N4 The Minimum Reporting Limit (MRL) verification check did not meet laboratory acceptance limits.
 - R12 RPD/RSD exceeded the method acceptance limit. Result less than 5 times the PQL.
 - V1 CCV recovery was above method acceptance limits. This target analyte was not detected in the sample.
- All soil, sludge, and solid matrix determinations are reported on a wet weight basis unless otherwise noted.
- ND Not Detected at or above the PQL
 - PQL Practical Quantitation Limit
 - DF Dilution Factor

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-01

Client Sample ID: D4B-LB
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	77		22		mg/L	1	08/12/2021 1200	08/17/2021 1415	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	250				mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
Total Nitrogen (NO2+NO3+TKN)-Calculation									
Nitrogen, Total	8.0				mg/L	1	08/10/2021 1600	08/11/2021 1059	JG
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	1.6		0.10		mg/L	1	08/10/2021 1549	08/10/2021 1552	EJ
ICP Dissolved Metals-E 200.7 (4.4)									
Boron	0.050	0.0032	0.10	E4	mg/L	1	08/12/2021 1200	08/17/2021 1415	MH
Calcium	31		4.0		mg/L	1	08/12/2021 1200	08/17/2021 1414	MH
Iron	ND		0.30		mg/L	1	08/12/2021 1200	08/17/2021 1415	MH
Magnesium	ND		3.0		mg/L	1	08/12/2021 1200	08/17/2021 1415	MH
Potassium	ND		5.0		mg/L	1	08/12/2021 1200	08/17/2021 1414	MH
Silica	8.9		0.20		mg/L	1	08/12/2021 1200	08/17/2021 1415	MH
Sodium	ND		5.0		mg/L	1	08/12/2021 1200	08/17/2021 1415	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Aluminum	ND		0.040		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Antimony	0.00091		0.00050		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Arsenic	0.0010		0.00050		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Barium	0.0019		0.00050		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Beryllium	ND		0.00025		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Cadmium	ND		0.00025		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Chromium	ND		0.00050		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Cobalt	ND		0.00025		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Copper	0.12		0.00050		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Lead	ND		0.00050		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Manganese	0.0044		0.00025		mg/L	1	08/12/2021 1200	08/18/2021 1508	CR
Molybdenum	0.0091		0.00025		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-01

Client Sample ID: D4B-LB
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Nickel	ND		0.00050		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Selenium	0.00087	0.00025	0.0025	E4	mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Silver	0.00038	0.000021	0.00050	E4	mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Thallium	ND	0.000023	0.00050	E8	mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
Zinc	ND		0.040		mg/L	1	08/12/2021 1200	08/17/2021 1739	CR
CVAA Dissolved Mercury-E 245.1									
Mercury	0.000053	0.000041	0.0010	E4	mg/L	1	08/16/2021 0916	08/16/2021 1320	CR
Turbidity-E180.1									
Turbidity	30		10	H3	NTU	100	08/12/2021 1050	08/12/2021 1245	EJ
ICP Total Metals-E200.7 (4.4)									
Boron	0.10		0.10		mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
Calcium	77		4.0		mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
Iron	44		0.30		mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
Magnesium	14		3.0		mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
Potassium	7.6		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
Silica	82		0.20		mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
Sodium	ND		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1546	MH
ICP/MS Total Metals-E200.8 (5.4)									
Aluminum	12		4.0		mg/L	100	08/12/2021 0940	08/13/2021 1252	CR
Antimony	0.0014		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Arsenic	0.0046		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Barium	0.074		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Beryllium	0.0023		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Cadmium	0.0027		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Chromium	0.011		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Cobalt	0.00848		0.000250		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Copper	7.5		0.050		mg/L	100	08/12/2021 0940	08/13/2021 1252	CR
Lead	0.062		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Manganese	1.7		0.025		mg/L	100	08/12/2021 0940	08/13/2021 1252	CR
Molybdenum	0.014		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Nickel	0.012		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Selenium	0.0073		0.0025		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Silver	0.0078		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Thallium	0.00030	0.000023	0.00050	E4	mg/L	1	08/12/2021 0940	08/13/2021 1157	CR

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-01

Client Sample ID: D4B-LB
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Uranium	0.0018		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
Zinc	0.74		0.040		mg/L	1	08/12/2021 0940	08/13/2021 1157	CR
CVAA Total Mercury-E245.1									
Mercury	ND	0.00036	0.0010	E8	mg/L	1	08/18/2021 0835	08/18/2021 1257	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Chloride	1.0		1.0		mg/L	1	08/10/2021 1549	08/10/2021 1552	EJ
Fluoride	ND		0.50		mg/L	1	08/10/2021 1549	08/10/2021 1552	EJ
Nitrogen, Nitrate (As N)	1.6		0.50		mg/L	1	08/10/2021 1549	08/10/2021 1552	EJ
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	08/10/2021 1549	08/10/2021 1552	EJ
Phosphorus, Dissolved	ND		0.50		mg/L	1	08/10/2021 1549	08/10/2021 1552	EJ
Orthophosphate (As P)									
Sulfate	6.2		5.0		mg/L	1	08/10/2021 1549	08/10/2021 1552	EJ
Calculation-Ion Balance									
Anion	7.30				meq/L	1	08/26/2021 1313	08/26/2021 1314	KB
Cation	1.55				meq/L	1	08/26/2021 1313	08/26/2021 1314	KB
Cation/Anion, % Difference	65.0				meq/L	1	08/26/2021 1313	08/26/2021 1314	KB
Total Kjeldahl Nitrogen-PAI-DK01									
Nitrogen, Total Kjeldahl	6.4		0.50		mg/L	1	08/10/2021 1600	08/11/2021 1059	JG
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	340		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Total (As CaCO3)	340		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Specific Conductance-SM2510 B									
Conductivity	210		0.10		µmhos/cm	1	08/18/2021 1320	08/18/2021 1400	CWB
Total Dissolved Solids (Residue, Filterable)-SM2540 C									

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-01

Client Sample ID: D4B-LB
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Dissolved Solids (Residue, Filterable)	140		20		mg/L	1	08/11/2021 0903	08/20/2021 0810	AGC
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	2700		10		mg/L	1	08/12/2021 0919	08/16/2021 1141	AGC
pH-SM4500-H+ B									
pH (pH Units)	7.9			H5	-	1	08/13/2021 1245	08/13/2021 1450	EJ
Temperature (°C)	23			H5	-	1	08/13/2021 1245	08/13/2021 1450	EJ
Ammonia as N-SM4500-NH3 B,C									
Nitrogen, Ammonia (As N)	ND		0.50		mg/L	1	08/19/2021 1300	08/19/2021 1655	JG
Silica-SM4500-SiO2 C									
Silica	8.8		2.0		mg/L	1	08/17/2021 1030	08/17/2021 1330	AGC

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-02

Client Sample ID: TTB-3
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	670		22		mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	2700				mg/L	20	08/12/2021 1200	08/17/2021 1320	MH
Total Nitrogen (NO2+NO3+TKN)-Calculation									
Nitrogen, Total	14				mg/L	10	08/10/2021 1600	08/11/2021 1059	JG
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	2.5		0.10		mg/L	1	08/10/2021 1549	08/10/2021 1611	EJ
ICP Dissolved Metals-E 200.7 (4.4)									
Boron	0.058	0.0032	0.10	E4	mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
Calcium	240		4.0		mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
Iron	ND		0.30		mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
Magnesium	17		3.0		mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
Potassium	5.6		5.0		mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
Silica	6.3		0.20		mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
Sodium	ND		5.0		mg/L	1	08/12/2021 1200	08/17/2021 1419	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Aluminum	ND		0.040		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Antimony	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Arsenic	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Barium	0.0012		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Beryllium	ND		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Cadmium	0.00089		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Chromium	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Cobalt	0.0026		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Copper	0.26		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Lead	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Manganese	1.3		0.025		mg/L	100	08/12/2021 1200	08/24/2021 1540	CR
Molybdenum	0.010		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Nickel	0.0014		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Selenium	0.0035		0.0025		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Silver	0.0000330.000021		0.00050	E4	mg/L	1	08/12/2021 1200	08/20/2021 1702	CR

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-02

Client Sample ID: TTB-3
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Thallium	ND	0.000023	0.00050	E8	mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
Zinc	ND		0.040		mg/L	1	08/12/2021 1200	08/20/2021 1702	CR
CVAA Dissolved Mercury-E 245.1									
Mercury	0.0000550	0.0000041	0.0010	E4	mg/L	1	08/16/2021 0916	08/16/2021 1323	CR
Turbidity-E180.1									
Turbidity	1300		10	H3	NTU	100	08/12/2021 1050	08/12/2021 1245	EJ
ICP Total Metals-E200.7 (4.4)									
Boron	0.61		0.10		mg/L	1	08/12/2021 1200	08/16/2021 1550	MH
Calcium	880		80		mg/L	20	08/12/2021 1200	08/17/2021 1320	MH
Iron	610		6.0		mg/L	20	08/12/2021 1200	08/17/2021 1320	MH
Magnesium	130		3.0		mg/L	1	08/12/2021 1200	08/16/2021 1550	MH
Potassium	56		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1550	MH
Silica	180		4.0		mg/L	20	08/12/2021 1200	08/17/2021 1321	MH
Sodium	ND		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1550	MH
ICP/MS Total Metals-E200.8 (5.4)									
Aluminum	110		20		mg/L	500	08/12/2021 0940	08/13/2021 1255	CR
Antimony	0.0015		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Arsenic	0.017		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Barium	0.38		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Beryllium	0.061		0.0025		mg/L	10	08/12/2021 0940	08/13/2021 1313	CR
Cadmium	0.034		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Chromium	0.18		0.0050		mg/L	10	08/12/2021 0940	08/13/2021 1313	CR
Cobalt	0.233		0.00250		mg/L	10	08/12/2021 0940	08/13/2021 1313	CR
Copper	89		0.25		mg/L	500	08/12/2021 0940	08/13/2021 1255	CR
Lead	0.48		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Manganese	18		0.025		mg/L	100	08/12/2021 0940	08/13/2021 1306	CR
Molybdenum	0.038		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Nickel	0.21		0.0050		mg/L	10	08/12/2021 0940	08/13/2021 1313	CR
Selenium	0.22		0.025		mg/L	10	08/12/2021 0940	08/13/2021 1313	CR
Silver	0.070		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Thallium	0.0020		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Uranium	0.033		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1200	CR
Zinc	8.7		4.0		mg/L	100	08/12/2021 0940	08/13/2021 1306	CR

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Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-02

Client Sample ID: TTB-3
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
CVAA Total Mercury-E245.1									
Mercury	0.0015	0.00071	0.0020	E4	mg/L	1	08/18/2021 0835	08/18/2021 1300	MH
Anions by Ion Chromatography-E300.0 (2.1)									
Chloride	1.4		1.0		mg/L	1	08/10/2021 1549	08/10/2021 1611	EJ
Fluoride	24		5.0		mg/L	10	08/10/2021 1549	08/17/2021 0452	JG
Nitrogen, Nitrate (As N)	2.5		0.50		mg/L	1	08/10/2021 1549	08/10/2021 1611	EJ
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	08/10/2021 1549	08/10/2021 1611	EJ
Phosphorus, Dissolved Orthophosphate (As P)	ND		0.50		mg/L	1	08/10/2021 1549	08/10/2021 1611	EJ
Sulfate	2300		250		mg/L	50	08/10/2021 1549	08/17/2021 0433	JG
Calculation-Ion Balance									
Anion	50.7				meq/L	1	08/26/2021 1313	08/26/2021 1314	KB
Cation	13.6				meq/L	1	08/26/2021 1313	08/26/2021 1314	KB
Cation/Anion, % Difference	57.7				meq/L	1	08/26/2021 1313	08/26/2021 1314	KB
Total Kjeldahl Nitrogen-PAI-DK01									
Nitrogen, Total Kjeldahl	12		5.0		mg/L	10	08/10/2021 1600	08/11/2021 1059	JG
Alkalinity-SM2320B									
Alkalinity, Bicarbonate (As CaCO3)	56		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Carbonate (As CaCO3)	ND		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Hydroxide (As CaCO3)	ND		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Phenolphthalein (As CaCO3)	ND		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Alkalinity, Total (As CaCO3)	56		2.0		mg/L	1	08/19/2021 1610	08/19/2021 1700	JG
Specific Conductance-SM2510 B									
Conductivity	4100		5.0		µmhos/cm	50	08/18/2021 1320	08/18/2021 1400	CWB
Total Dissolved Solids (Residue, Filterable)-SM2540 C									
Total Dissolved Solids (Residue, Filterable)	2400		20		mg/L	1	08/11/2021 0903	08/20/2021 0810	AGC

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-02

Client Sample ID: TTB-3
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Total Suspended Solids (Residue, Non-Filterable)-SM2540 D									
Total Suspended Solids	860		10		mg/L	1	08/12/2021 0919	08/16/2021 1141	AGC
pH-SM4500-H+ B									
pH (pH Units)	4.7			H5	-	1	08/13/2021 1245	08/13/2021 1450	EJ
Temperature (°C)	22			H5	-	1	08/13/2021 1245	08/13/2021 1450	EJ
Ammonia as N-SM4500-NH3 B,C									
Nitrogen, Ammonia (As N)	0.81		0.50		mg/L	1	08/19/2021 1300	08/19/2021 1655	JG

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-03

Client Sample ID: TTB-L
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	1500		22		mg/L	1	08/12/2021 1200	08/16/2021 1641	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	1400				mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
Total Nitrogen (NO2+NO3+TKN)-Calculation									
Nitrogen, Total	6.8				mg/L	1	08/10/2021 1600	08/11/2021 1059	JG
Nitrate + Nitrite Sum-Calculation									
Nitrate and Nitrite Sum	1.2		0.10		mg/L	1	08/10/2021 1549	08/10/2021 1630	EJ
ICP Dissolved Metals-E 200.7 (4.4)									
Boron	0.083	0.0032	0.10	E4	mg/L	1	08/12/2021 1200	08/16/2021 1642	MH
Calcium	330		4.0	M3	mg/L	1	08/12/2021 1200	08/16/2021 1641	MH
Iron	41		0.30	M3	mg/L	1	08/12/2021 1200	08/16/2021 1641	MH
Magnesium	160		3.0	M3	mg/L	1	08/12/2021 1200	08/16/2021 1641	MH
Potassium	ND		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1641	MH
Silica	27		0.20	M6	mg/L	1	08/12/2021 1200	08/16/2021 1642	MH
Sodium	ND		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1641	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Aluminum	100		20		mg/L	500	08/12/2021 1200	08/24/2021 1543	CR
Antimony	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Arsenic	0.0044		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Barium	0.0020		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Beryllium	0.020		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Cadmium	0.054		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Chromium	ND		0.050		mg/L	100	08/12/2021 1200	08/24/2021 1547	CR
Cobalt	0.35		0.025		mg/L	100	08/12/2021 1200	08/24/2021 1547	CR
Copper	170		0.25		mg/L	500	08/12/2021 1200	08/24/2021 1543	CR
Lead	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Manganese	26		0.025		mg/L	100	08/12/2021 1200	08/24/2021 1547	CR
Molybdenum	0.00027		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Nickel	0.11		0.050		mg/L	100	08/12/2021 1200	08/24/2021 1547	CR
Selenium	0.078		0.0025		mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Silver	0.00011	0.000021	0.00050	E4	mg/L	1	08/12/2021 1200	08/20/2021 1705	CR

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-03

Client Sample ID: TTB-L
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Thallium	0.0000960	0.000023	0.00050	E4	mg/L	1	08/12/2021 1200	08/20/2021 1705	CR
Zinc	17		4.0		mg/L	100	08/12/2021 1200	08/24/2021 1547	CR
CVAA Dissolved Mercury-E 245.1									
Mercury	0.0000660	0.000041	0.0010	E4, V1	mg/L	1	08/23/2021 1015	08/23/2021 1608	CR
Turbidity-E180.1									
Turbidity	8700		100	H3	NTU	1000	08/12/2021 1050	08/12/2021 1245	EJ
ICP Total Metals-E200.7 (4.4)									
Boron	0.076	0.0032	0.10	E4	mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
Calcium	340		4.0		mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
Iron	30		0.30		mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
Magnesium	130		3.0		mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
Potassium	ND		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
Silica	40		0.20		mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
Sodium	ND		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1312	MH
ICP/MS Total Metals-E200.8 (5.4)									
Aluminum	77		20		mg/L	500	08/12/2021 0940	08/13/2021 1259	CR
Antimony	0.00054		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Arsenic	0.0083		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Barium	0.019		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Beryllium	0.016		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Cadmium	0.062		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Chromium	0.0089		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Cobalt	0.228		0.000250		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Copper	130		0.25		mg/L	500	08/12/2021 0940	08/13/2021 1259	CR
Lead	0.025		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Manganese	19		0.025		mg/L	100	08/12/2021 0940	08/13/2021 1309	CR
Molybdenum	0.0086		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Nickel	0.078		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Selenium	0.088	0.025	0.25	E4	mg/L	100	08/12/2021 0940	08/13/2021 1309	CR
Silver	0.0016		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Thallium	0.00025	0.000023	0.00050	E4	mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Uranium	0.049		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1203	CR
Zinc	13		4.0		mg/L	100	08/12/2021 0940	08/13/2021 1309	CR

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-03

Client Sample ID: TTB-L
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
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CVAA Total Mercury-E245.1

Mercury	ND	0.00036	0.0010	E8	mg/L	1	08/18/2021 0835	08/18/2021 1303	MH
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Anions by Ion Chromatography-E300.0 (2.1)

Chloride	1.1		1.0		mg/L	1	08/10/2021 1549	08/10/2021 1630	EJ
Fluoride	36		25		mg/L	50	08/10/2021 1549	08/17/2021 0626	JG
Fluoride	23		5.0		mg/L	10	08/10/2021 1549	08/17/2021 0645	JG
Nitrogen, Nitrate (As N)	1.2		0.50		mg/L	1	08/10/2021 1549	08/10/2021 1630	EJ
Nitrogen, Nitrite (As N)	ND		0.10		mg/L	1	08/10/2021 1549	08/10/2021 1630	EJ
Phosphorus, Dissolved Orthophosphate (As P)	ND		0.50		mg/L	1	08/10/2021 1549	08/10/2021 1630	EJ
Sulfate	2300		500	N4	mg/L	100	08/10/2021 1549	08/19/2021 1442	JG

Total Kjeldahl Nitrogen-PAI-DK01

Nitrogen, Total Kjeldahl	5.6		0.50		mg/L	1	08/10/2021 1600	08/11/2021 1059	JG
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Specific Conductance-SM2510 B

Conductivity	4600		5.0		µmhos/cm	50	08/18/2021 1320	08/18/2021 1400	CWB
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Total Dissolved Solids (Residue, Filterable)-SM2540 C

Total Dissolved Solids (Residue, Filterable)	2400		20		mg/L	1	08/11/2021 0903	08/20/2021 0810	AGC
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Total Suspended Solids (Residue, Non-Filterable)-SM2540 D

Total Suspended Solids	8900		10		mg/L	1	08/12/2021 0919	08/16/2021 1141	AGC
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pH-SM4500-H+ B

pH (pH Units)	3.7			E, H5	-	1	08/13/2021 1245	08/13/2021 1450	EJ
Temperature (°C)	23			H5	-	1	08/13/2021 1245	08/13/2021 1450	EJ

Ammonia as N-SM4500-NH3 B,C

Nitrogen, Ammonia (As N)	ND		0.50		mg/L	1	08/19/2021 1300	08/19/2021 1655	JG
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Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-04

Client Sample ID: TTA3
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Hardness, Dissolved-[CALC]									
Hardness, Calcium/Magnesium (As CaCO3) Dissolved	340		22		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
Hardness-Calculation									
Hardness, Calcium/Magnesium (As CaCO3)	1000				mg/L	1	08/12/2021 1200	08/16/2021 1554	MH
ICP Dissolved Metals-E 200.7 (4.4)									
Boron	0.13		0.10		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
Calcium	120		4.0		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
Iron	ND		0.30		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
Magnesium	7.9		3.0		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
Potassium	7.1		5.0		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
Silica	6.4		0.20		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
Sodium	27		5.0		mg/L	1	08/12/2021 1200	08/17/2021 1444	MH
ICP/MS Dissolved Metals-E 200.8 (5.4)									
Aluminum	ND		0.040		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Antimony	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Arsenic	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Barium	0.011		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Beryllium	ND		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Cadmium	ND		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Chromium	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Cobalt	0.0015		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Copper	0.29		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Lead	ND		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Manganese	0.25		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Molybdenum	0.031		0.00025		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Nickel	0.00075		0.00050		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Selenium	0.0022	0.00025	0.0025	E4	mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Silver	0.000073	0.000021	0.00050	E4	mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Thallium	ND	0.000023	0.00050	E8	mg/L	1	08/12/2021 1200	08/20/2021 1709	CR
Zinc	ND		0.040		mg/L	1	08/12/2021 1200	08/20/2021 1709	CR

CVAA Dissolved Mercury-E 245.1

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Lab Sample ID: 21H0316-04

Client Sample ID: TTA3
Collection Date/Time: 08/08/2021 2106
Matrix: Storm Water
Order Name: Baseline Stormwater Monitoring

Analyses	Result	MDL	PQL	Qual	Units	DF	Prep Date	Analysis Date	Analyst
Mercury	0.0000770.000041		0.0010	E4, V1	mg/L	1	08/23/2021 1015	08/23/2021 1611	CR

ICP Total Metals-E200.7 (4.4)

Boron	0.29		0.10		mg/L	1	08/12/2021 1200	08/16/2021 1554	MH
Calcium	270		4.0		mg/L	1	08/12/2021 1200	08/16/2021 1554	MH
Iron	210		3.0		mg/L	10	08/12/2021 1200	08/17/2021 1324	MH
Magnesium	76		3.0		mg/L	1	08/12/2021 1200	08/16/2021 1554	MH
Potassium	33		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1554	MH
Silica	120		2.0		mg/L	10	08/12/2021 1200	08/17/2021 1325	MH
Sodium	ND		5.0		mg/L	1	08/12/2021 1200	08/16/2021 1554	MH

ICP/MS Total Metals-E200.8 (5.4)

Aluminum	73		4.0		mg/L	100	08/12/2021 0940	08/13/2021 1302	CR
Antimony	ND		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Arsenic	0.016		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Barium	0.38		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Beryllium	0.011		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Cadmium	0.0090		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Chromium	0.053		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Cobalt	0.0502		0.000250		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Copper	51		0.050		mg/L	100	08/12/2021 0940	08/13/2021 1302	CR
Lead	0.16		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Manganese	4.5		0.025		mg/L	100	08/12/2021 0940	08/13/2021 1302	CR
Molybdenum	0.17		0.00025		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Nickel	0.056		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Selenium	0.14	0.025	0.25	E4	mg/L	100	08/12/2021 0940	08/13/2021 1302	CR
Silver	0.024		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Thallium	0.0012		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Uranium	0.019		0.00050		mg/L	1	08/12/2021 0940	08/13/2021 1207	CR
Zinc	ND		4.0		mg/L	100	08/12/2021 0940	08/13/2021 1302	CR

CVAA Total Mercury-E245.1

Mercury	0.00098	0.00071	0.0020	E4	mg/L	1	08/18/2021 0835	08/18/2021 1305	MH
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Client: Rosemont Copper Company
 Project: Baseline Stormwater Monitoring
 Work Order: 21H0316
 Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108185 - E 200.7 (4.4)										
Blank (2108185-BLK1)										
				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Boron	0.025	0.10	mg/L							
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Potassium	ND	5.0	mg/L							
Silica	0.014	0.20	mg/L							
Sodium	ND	5.0	mg/L							
LCS (2108185-BS1)										
				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Boron	1.0	0.10	mg/L	1.000		102	85-115			
Calcium	9.9	4.0	mg/L	10.00		99	85-115			
Iron	0.99	0.30	mg/L	1.000		99	85-115			
Magnesium	9.6	3.0	mg/L	10.00		96	85-115			
Potassium	9.8	5.0	mg/L	10.00		98	85-115			
Sodium	9.4	5.0	mg/L	10.00		94	85-115			
LCS (2108185-BS2)										
				Prepared: 08/12/2021 Analyzed: 08/17/2021						
Silica	9.0	0.20	mg/L	10.00		90	85-115			
LCS Dup (2108185-BSD1)										
				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Boron	1.0	0.10	mg/L	1.000		102	85-115	0.2	20	
Calcium	10	4.0	mg/L	10.00		101	85-115	3	20	
Iron	1.0	0.30	mg/L	1.000		101	85-115	1	20	
Magnesium	9.7	3.0	mg/L	10.00		97	85-115	1	20	
Potassium	10	5.0	mg/L	10.00		100	85-115	2	20	
Sodium	10	5.0	mg/L	10.00		100	85-115	7	20	
LCS Dup (2108185-BSD2)										
				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Silica	8.9	0.20	mg/L	10.00		89	85-115	1	20	
Matrix Spike (2108185-MS1)										
		Source: 21H0316-03			Prepared: 08/12/2021 Analyzed: 08/16/2021					
Boron	1.1	0.10	mg/L	1.000	0.083	98	70-130			
Calcium	320	4.0	mg/L	10.00	330	NR	70-130			M3
Iron	41	0.30	mg/L	1.000	41	NR	70-130			M3
Magnesium	170	3.0	mg/L	10.00	160	30	70-130			M3
Potassium	11	5.0	mg/L	10.00	0.33	106	70-130			
Sodium	8.8	5.0	mg/L	10.00	ND	88	70-130			
Matrix Spike (2108185-MS2)										
		Source: 21H0344-01			Prepared: 08/12/2021 Analyzed: 08/16/2021					
Boron	1.3	0.10	mg/L	1.000	0.22	110	70-130			
Calcium	200	4.0	mg/L	10.00	200	NR	70-130			M3
Iron	1.2	0.30	mg/L	1.000	0.058	114	70-130			
Magnesium	83	3.0	mg/L	10.00	78	46	70-130			M3
Potassium	17	5.0	mg/L	10.00	6.6	106	70-130			
Silica	63	0.20	mg/L		67		70-130			
Sodium	120	5.0	mg/L	10.00	120	NR	70-130			M3
Matrix Spike (2108185-MS3)										
		Source: 21H0316-03			Prepared: 08/12/2021 Analyzed: 08/16/2021					
Silica	41	0.20	mg/L	10.00	27	142	70-130			M6

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch 2108185 - E 200.7 (4.4)

Matrix Spike (2108185-MS4)	Source: 21H0344-01			Prepared: 08/12/2021 Analyzed: 08/16/2021						
Silica	78	0.20	mg/L	10.00	67	113	70-130			

Batch 2108186 - E 200.8 (5.4)

Blank (2108186-BLK1)	Prepared: 08/12/2021 Analyzed: 08/17/2021									
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Aluminum	ND	0.040	mg/L							
Antimony	ND	0.00050	mg/L							
Arsenic	ND	0.00050	mg/L							
Barium	ND	0.00050	mg/L							
Beryllium	ND	0.00025	mg/L							
Cadmium	ND	0.00025	mg/L							
Chromium	ND	0.00050	mg/L							
Cobalt	ND	0.00025	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Manganese	ND	0.00025	mg/L							
Molybdenum	ND	0.00025	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	0.00026	0.0025	mg/L							
Silver	0.000035	0.00050	mg/L							
Thallium	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							

LCS (2108186-BS1)

Prepared: 08/12/2021 Analyzed: 08/17/2021

Aluminum	0.10	0.040	mg/L	0.1000		103	85-115			
Antimony	0.051	0.00050	mg/L	0.05000		101	85-115			
Arsenic	0.052	0.00050	mg/L	0.05000		104	85-115			
Barium	0.051	0.00050	mg/L	0.05000		101	85-115			
Beryllium	0.052	0.00025	mg/L	0.05000		103	85-115			
Cadmium	0.049	0.00025	mg/L	0.05000		99	85-115			
Chromium	0.049	0.00050	mg/L	0.05000		98	85-115			
Cobalt	0.048	0.00025	mg/L	0.05000		97	85-115			
Copper	0.048	0.00050	mg/L	0.05000		95	85-115			
Lead	0.048	0.00050	mg/L	0.05000		96	85-115			
Manganese	0.049	0.00025	mg/L	0.05000		99	85-115			
Molybdenum	0.049	0.00025	mg/L	0.05000		98	85-115			
Nickel	0.048	0.00050	mg/L	0.05000		97	85-115			
Selenium	0.046	0.0025	mg/L	0.05000		91	85-115			
Silver	0.045	0.00050	mg/L	0.05000		90	85-115			
Thallium	0.047	0.00050	mg/L	0.05000		95	85-115			
Zinc	0.10	0.040	mg/L	0.1000		104	85-115			

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
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Batch 2108186 - E 200.8 (5.4)

LCS Dup (2108186-BSD1)

Prepared: 08/12/2021 Analyzed: 08/17/2021

Aluminum	0.10	0.040	mg/L	0.1000		103	85-115	0.3	20	
Antimony	0.052	0.00050	mg/L	0.05000		104	85-115	2	20	
Arsenic	0.052	0.00050	mg/L	0.05000		105	85-115	0.3	20	
Barium	0.051	0.00050	mg/L	0.05000		103	85-115	2	20	
Beryllium	0.051	0.00025	mg/L	0.05000		102	85-115	1	20	
Cadmium	0.049	0.00025	mg/L	0.05000		98	85-115	0.7	20	
Chromium	0.049	0.00050	mg/L	0.05000		99	85-115	1	20	
Cobalt	0.049	0.00025	mg/L	0.05000		97	85-115	0.7	20	
Copper	0.048	0.00050	mg/L	0.05000		96	85-115	1	20	
Lead	0.048	0.00050	mg/L	0.05000		97	85-115	0.8	20	
Manganese	0.049	0.00025	mg/L	0.05000		99	85-115	0.001	20	
Molybdenum	0.049	0.00025	mg/L	0.05000		98	85-115	0.1	20	
Nickel	0.049	0.00050	mg/L	0.05000		98	85-115	1	20	
Selenium	0.049	0.0025	mg/L	0.05000		98	85-115	7	20	
Silver	0.045	0.00050	mg/L	0.05000		90	85-115	0.6	20	
Thallium	0.048	0.00050	mg/L	0.05000		96	85-115	1	20	
Zinc	0.10	0.040	mg/L	0.1000		105	85-115	0.8	20	

Matrix Spike (2108186-MS1)

Source: 21H0316-01

Prepared: 08/12/2021 Analyzed: 08/17/2021

Aluminum	0.13	0.040	mg/L	0.1000	ND	126	70-130			
Antimony	0.062	0.00050	mg/L	0.05000	0.00091	122	70-130			
Arsenic	0.062	0.00050	mg/L	0.05000	0.0010	122	70-130			
Barium	0.061	0.00050	mg/L	0.05000	0.0019	118	70-130			
Beryllium	0.060	0.00025	mg/L	0.05000	0.000027	119	70-130			
Cadmium	0.057	0.00025	mg/L	0.05000	0.000084	113	70-130			
Chromium	0.057	0.00050	mg/L	0.05000	0.00012	113	70-130			
Cobalt	0.055	0.00025	mg/L	0.05000	0.000038	110	70-130			
Copper	0.17	0.00050	mg/L	0.05000	0.12	109	70-130			
Lead	0.057	0.00050	mg/L	0.05000	ND	113	70-130			
Manganese	0.052	0.00025	mg/L	0.05000	0.0044	95	70-130			
Molybdenum	0.065	0.00025	mg/L	0.05000	0.0091	112	70-130			
Nickel	0.055	0.00050	mg/L	0.05000	0.00027	109	70-130			
Selenium	0.057	0.0025	mg/L	0.05000	0.00087	113	70-130			
Silver	0.054	0.00050	mg/L	0.05000	0.00038	108	70-130			
Thallium	0.056	0.00050	mg/L	0.05000	ND	113	70-130			
Zinc	0.12	0.040	mg/L	0.1000	0.0024	118	70-130			

Batch 2108196 - E200.8 (5.4)

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108196 - E200.8 (5.4)										
Blank (2108196-BLK1)										
					Prepared: 08/12/2021 Analyzed: 08/13/2021					
Aluminum	ND	0.040	mg/L							
Antimony	ND	0.00050	mg/L							
Arsenic	ND	0.00050	mg/L							
Barium	ND	0.00050	mg/L							
Beryllium	ND	0.00025	mg/L							
Cadmium	ND	0.00025	mg/L							
Chromium	ND	0.00050	mg/L							
Cobalt	ND	0.000250	mg/L							
Copper	ND	0.00050	mg/L							
Lead	ND	0.00050	mg/L							
Manganese	ND	0.00025	mg/L							
Molybdenum	ND	0.00025	mg/L							
Nickel	ND	0.00050	mg/L							
Selenium	ND	0.0015	mg/L							
Silver	ND	0.00050	mg/L							
Thallium	ND	0.00050	mg/L							
Uranium	ND	0.00050	mg/L							
Zinc	ND	0.040	mg/L							

LCS (2108196-BS1)										
					Prepared: 08/12/2021 Analyzed: 08/13/2021					
Aluminum	0.11	0.040	mg/L	0.1000		106	85-115			
Antimony	0.052	0.00050	mg/L	0.05000		103	85-115			
Arsenic	0.053	0.00050	mg/L	0.05000		106	85-115			
Barium	0.051	0.00050	mg/L	0.05000		102	85-115			
Beryllium	0.053	0.00025	mg/L	0.05000		106	85-115			
Cadmium	0.053	0.00025	mg/L	0.05000		106	85-115			
Chromium	0.051	0.00050	mg/L	0.05000		103	85-115			
Cobalt	0.0513	0.000250	mg/L	0.05000		103	85-115			
Copper	0.051	0.00050	mg/L	0.05000		102	85-115			
Lead	0.051	0.00050	mg/L	0.05000		102	85-115			
Manganese	0.051	0.00025	mg/L	0.05000		102	85-115			
Molybdenum	0.051	0.00025	mg/L	0.05000		101	85-115			
Nickel	0.052	0.00050	mg/L	0.05000		103	85-115			
Selenium	0.056	0.0015	mg/L	0.05000		113	85-115			
Silver	0.052	0.00050	mg/L	0.05000		103	85-115			
Thallium	0.048	0.00050	mg/L	0.05000		96	85-115			
Uranium	0.050	0.00050	mg/L	0.05000		101	85-115			
Zinc	0.11	0.040	mg/L	0.1000		114	85-115			

Client: Rosemont Copper Company
 Project: Baseline Stormwater Monitoring
 Work Order: 21H0316
 Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108196 - E200.8 (5.4)										
LCS Dup (2108196-BSD1)										
					Prepared: 08/12/2021 Analyzed: 08/13/2021					
Aluminum	0.11	0.040	mg/L	0.1000		106	85-115	0.05	20	
Antimony	0.051	0.00050	mg/L	0.05000		102	85-115	0.8	20	
Arsenic	0.052	0.00050	mg/L	0.05000		105	85-115	2	20	
Barium	0.050	0.00050	mg/L	0.05000		101	85-115	1	20	
Beryllium	0.053	0.00025	mg/L	0.05000		106	85-115	0.2	20	
Cadmium	0.052	0.00025	mg/L	0.05000		105	85-115	1	20	
Chromium	0.052	0.00050	mg/L	0.05000		103	85-115	1	20	
Cobalt	0.0511	0.000250	mg/L	0.05000		102	85-115	0.3	20	
Copper	0.052	0.00050	mg/L	0.05000		103	85-115	0.9	20	
Lead	0.051	0.00050	mg/L	0.05000		102	85-115	0.4	20	
Manganese	0.051	0.00025	mg/L	0.05000		102	85-115	0.03	20	
Molybdenum	0.050	0.00025	mg/L	0.05000		99	85-115	2	20	
Nickel	0.053	0.00050	mg/L	0.05000		106	85-115	2	20	
Selenium	0.056	0.0015	mg/L	0.05000		112	85-115	1	20	
Silver	0.050	0.00050	mg/L	0.05000		101	85-115	2	20	
Thallium	0.048	0.00050	mg/L	0.05000		96	85-115	0.3	20	
Uranium	0.050	0.00050	mg/L	0.05000		100	85-115	0.6	20	
Zinc	0.11	0.040	mg/L	0.1000		113	85-115	1	20	

Matrix Spike (2108196-MS1)										
					Source: 21H0034-01					
					Prepared: 08/12/2021 Analyzed: 08/13/2021					
Aluminum	0.20	0.040	mg/L	0.1000	0.087	109	70-130			
Antimony	0.049	0.00050	mg/L	0.05000	0.00012	97	70-130			
Arsenic	0.053	0.00050	mg/L	0.05000	0.0039	98	70-130			
Barium	0.055	0.00050	mg/L	0.05000	0.0074	96	70-130			
Beryllium	0.048	0.00025	mg/L	0.05000	ND	96	70-130			
Cadmium	0.048	0.00025	mg/L	0.05000	ND	96	70-130			
Chromium	0.052	0.00050	mg/L	0.05000	0.0045	95	70-130			
Cobalt	0.0453	0.000250	mg/L	0.05000	0.000148	90	70-130			
Copper	0.047	0.00050	mg/L	0.05000	0.0058	82	70-130			
Lead	0.048	0.00050	mg/L	0.05000	0.00045	96	70-130			
Manganese	0.057	0.00025	mg/L	0.05000	0.0093	95	70-130			
Molybdenum	0.051	0.00025	mg/L	0.05000	0.0036	94	70-130			
Nickel	0.045	0.00050	mg/L	0.05000	0.00098	88	70-130			
Selenium	0.050	0.0015	mg/L	0.05000	0.0011	98	70-130			
Silver	0.042	0.00050	mg/L	0.05000	ND	84	70-130			
Thallium	0.047	0.00050	mg/L	0.05000	0.00062	93	70-130			
Uranium	0.052	0.00050	mg/L	0.05000	0.0028	99	70-130			
Zinc	0.11	0.040	mg/L	0.1000	ND	108	70-130			

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108196 - E200.8 (5.4)										
Matrix Spike (2108196-MS2)		Source: 21H0151-01			Prepared: 08/12/2021 Analyzed: 08/13/2021					
Aluminum	0.20	0.040	mg/L	0.1000	0.11	89	70-130			
Antimony	0.049	0.00050	mg/L	0.05000	0.00037	98	70-130			
Arsenic	0.053	0.00050	mg/L	0.05000	0.0034	98	70-130			
Barium	0.16	0.00050	mg/L	0.05000	0.11	95	70-130			
Beryllium	0.048	0.00025	mg/L	0.05000	0.000055	96	70-130			
Cadmium	0.047	0.00025	mg/L	0.05000	0.000066	93	70-130			
Chromium	0.046	0.00050	mg/L	0.05000	0.00045	91	70-130			
Cobalt	0.0445	0.000250	mg/L	0.05000	0.000339	88	70-130			
Copper	0.044	0.00050	mg/L	0.05000	0.0023	83	70-130			
Lead	0.050	0.00050	mg/L	0.05000	0.00028	99	70-130			
Manganese	0.066	0.00025	mg/L	0.05000	0.021	90	70-130			
Molybdenum	0.053	0.00025	mg/L	0.05000	0.0046	97	70-130			
Nickel	0.045	0.00050	mg/L	0.05000	0.0034	84	70-130			
Selenium	0.051	0.0015	mg/L	0.05000	0.0018	99	70-130			
Silver	0.037	0.00050	mg/L	0.05000	ND	74	70-130			
Thallium	0.049	0.00050	mg/L	0.05000	0.00065	97	70-130			
Uranium	0.056	0.00050	mg/L	0.05000	0.0041	104	70-130			
Zinc	0.10	0.040	mg/L	0.1000	ND	100	70-130			

Batch 2108198 - E200.7 (4.4)

Blank (2108198-BLK1)				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Boron	0.024	0.10	mg/L							
Calcium	ND	4.0	mg/L							
Iron	ND	0.30	mg/L							
Magnesium	ND	3.0	mg/L							
Potassium	ND	5.0	mg/L							
Silica	ND	0.20	mg/L							
Sodium	ND	5.0	mg/L							

LCS (2108198-BS1)				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Boron	1.1	0.10	mg/L	1.000		106	85-115			
Calcium	11	4.0	mg/L	10.00		106	85-115			
Iron	1.1	0.30	mg/L	1.000		106	85-115			
Magnesium	10	3.0	mg/L	10.00		105	85-115			
Potassium	10	5.0	mg/L	10.00		105	85-115			
Sodium	11	5.0	mg/L	10.00		108	85-115			

LCS (2108198-BS2)				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Silica	9.5	0.20	mg/L	10.00		95	85-115			

LCS Dup (2108198-BSD1)				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Boron	1.1	0.10	mg/L	1.000		107	85-115	1	20	
Calcium	11	4.0	mg/L	10.00		107	85-115	1	20	
Iron	1.1	0.30	mg/L	1.000		105	85-115	0.2	20	
Magnesium	10	3.0	mg/L	10.00		105	85-115	0.2	20	
Potassium	11	5.0	mg/L	10.00		106	85-115	1	20	
Sodium	11	5.0	mg/L	10.00		109	85-115	1	20	

Client: Rosemont Copper Company
 Project: Baseline Stormwater Monitoring
 Work Order: 21H0316
 Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108198 - E200.7 (4.4)										
LCS Dup (2108198-BSD2)				Prepared: 08/12/2021 Analyzed: 08/16/2021						
Silica	9.5	0.20	mg/L	10.00		95	85-115	0.1	20	
Matrix Spike (2108198-MS1)				Source: 21H0011-01		Prepared: 08/12/2021 Analyzed: 08/16/2021				
Boron	1.1	0.10	mg/L	1.000	0.11	103	70-130			
Calcium	39	4.0	mg/L	10.00	29	105	70-130			
Iron	2.4	0.30	mg/L	1.000	1.4	105	70-130			
Magnesium	13	3.0	mg/L	10.00	2.5	106	70-130			
Potassium	13	5.0	mg/L	10.00	2.6	106	70-130			
Sodium	74	5.0	mg/L	10.00	66	82	70-130			
Matrix Spike (2108198-MS2)				Source: 21H0336-01		Prepared: 08/12/2021 Analyzed: 08/16/2021				
Boron	1.1	0.10	mg/L	1.000	0.044	103	70-130			
Calcium	61	4.0	mg/L	10.00	54	74	70-130			
Iron	1.2	0.30	mg/L	1.000	0.099	107	70-130			
Magnesium	29	3.0	mg/L	10.00	21	80	70-130			
Potassium	13	5.0	mg/L	10.00	3.1	102	70-130			
Sodium	25	5.0	mg/L	10.00	17	87	70-130			
Matrix Spike (2108198-MS3)				Source: 21H0316-03		Prepared: 08/12/2021 Analyzed: 08/16/2021				
Silica	47	0.20	mg/L	10.00	40	76	70-130			
Batch 2108212 - E 245.1										
Blank (2108212-BLK1)				Prepared & Analyzed: 08/16/2021						
Mercury	0.000040	0.0010	mg/L							
LCS (2108212-BS1)				Prepared & Analyzed: 08/16/2021						
Mercury	0.0051	0.0010	mg/L	0.005000		102	85-115			
LCS Dup (2108212-BSD1)				Prepared & Analyzed: 08/16/2021						
Mercury	0.0052	0.0010	mg/L	0.005000		105	85-115	2	20	
Matrix Spike (2108212-MS1)				Source: 21H0151-01		Prepared & Analyzed: 08/16/2021				
Mercury	0.0051	0.0010	mg/L	0.005000	0.000055	101	70-130			
Matrix Spike Dup (2108212-MSD1)				Source: 21H0151-01		Prepared & Analyzed: 08/16/2021				
Mercury	0.0051	0.0010	mg/L	0.005000	0.000055	102	70-130	1	20	
Batch 2108232 - E245.1										
Blank (2108232-BLK1)				Prepared & Analyzed: 08/18/2021						
Mercury	ND	0.0010	mg/L							
LCS (2108232-BS1)				Prepared & Analyzed: 08/18/2021						
Mercury	0.0050	0.0010	mg/L	0.005000		101	85-115			
LCS Dup (2108232-BSD1)				Prepared & Analyzed: 08/18/2021						
Mercury	0.0051	0.0010	mg/L	0.005000		102	85-115	1	20	
Matrix Spike (2108232-MS1)				Source: 21H0305-01		Prepared & Analyzed: 08/18/2021				
Mercury	0.0050	0.0010	mg/L	0.005000	ND	101	70-130			

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
Work Order: 21H0316
Date Received: 08/10/2021

QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108232 - E245.1										
Matrix Spike (2108232-MS2)		Source: 21H0368-01		Prepared & Analyzed: 08/18/2021						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	100	70-130			
Matrix Spike Dup (2108232-MSD1)		Source: 21H0305-01		Prepared & Analyzed: 08/18/2021						
Mercury	0.0050	0.0010	mg/L	0.005000	ND	100	70-130	0.8	20	
Matrix Spike Dup (2108232-MSD2)		Source: 21H0368-01		Prepared & Analyzed: 08/18/2021						
Mercury	0.0049	0.0010	mg/L	0.005000	ND	98	70-130	2	20	
Batch 2108298 - E 245.1										
Blank (2108298-BLK1)				Prepared & Analyzed: 08/23/2021						
Mercury	0.000061	0.0010	mg/L							
LCS (2108298-BS1)				Prepared & Analyzed: 08/23/2021						
Mercury	0.0055	0.0010	mg/L	0.005000		109	85-115			
LCS Dup (2108298-BSD1)				Prepared & Analyzed: 08/23/2021						
Mercury	0.0054	0.0010	mg/L	0.005000		108	85-115	1	20	
Matrix Spike (2108298-MS1)		Source: 21H0394-03		Prepared & Analyzed: 08/23/2021						
Mercury	0.0055	0.0010	mg/L	0.005000	0.000053	110	70-130			
Matrix Spike Dup (2108298-MSD1)		Source: 21H0394-03		Prepared & Analyzed: 08/23/2021						
Mercury	0.0056	0.0010	mg/L	0.005000	0.000053	111	70-130	1	20	

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108156 - SM2540 C										
Duplicate (2108156-DUP1) Source: 21H0190-03 Prepared: 08/11/2021 Analyzed: 08/20/2021										
Total Dissolved Solids (Residue, Filterable)	1500	20	mg/L		1600			3	5	
Duplicate (2108156-DUP2) Source: 21H0277-02 Prepared: 08/11/2021 Analyzed: 08/20/2021										
Total Dissolved Solids (Residue, Filterable)	1500	20	mg/L		1500			3	5	
Duplicate (2108156-DUP3) Source: 21H0309-01 Prepared: 08/11/2021 Analyzed: 08/20/2021										
Total Dissolved Solids (Residue, Filterable)	2800	20	mg/L		2800			2	5	
Batch 2108163 - PAI-DK01										
Blank (2108163-BLK1) Prepared: 08/10/2021 Analyzed: 08/11/2021										
Nitrogen, Total Kjeldahl	ND	0.50	mg/L							
LCS (2108163-BS1) Prepared: 08/10/2021 Analyzed: 08/11/2021										
Nitrogen, Total Kjeldahl	5.4	0.50	mg/L	5.000		108	80-120			
LCS Dup (2108163-BSD1) Prepared: 08/10/2021 Analyzed: 08/11/2021										
Nitrogen, Total Kjeldahl	5.2	0.50	mg/L	5.000		103	80-120	4	20	
Matrix Spike (2108163-MS1) Source: 21H0194-01 Prepared: 08/10/2021 Analyzed: 08/11/2021										
Nitrogen, Total Kjeldahl	5.4	0.50	mg/L	5.000	0.66	96	80-120			
Matrix Spike (2108163-MS2) Source: 21H0295-02 Prepared: 08/10/2021 Analyzed: 08/11/2021										
Nitrogen, Total Kjeldahl	6.0	0.50	mg/L	5.000	1.5	90	80-120			
Matrix Spike Dup (2108163-MSD1) Source: 21H0194-01 Prepared: 08/10/2021 Analyzed: 08/11/2021										
Nitrogen, Total Kjeldahl	5.3	0.50	mg/L	5.000	0.66	94	80-120	2	20	
Matrix Spike Dup (2108163-MSD2) Source: 21H0295-02 Prepared: 08/10/2021 Analyzed: 08/11/2021										
Nitrogen, Total Kjeldahl	6.1	0.50	mg/L	5.000	1.5	91	80-120	0.8	20	
Batch 2108177 - SM2540 D										
Duplicate (2108177-DUP1) Source: 21H0238-01 Prepared: 08/12/2021 Analyzed: 08/16/2021										
Total Suspended Solids	ND	10	mg/L		10				5	R12
Duplicate (2108177-DUP2) Source: 21H0295-03 Prepared: 08/12/2021 Analyzed: 08/16/2021										
Total Suspended Solids	3900	10	mg/L		3800			2	5	
Batch 2108183 - E180.1										
Duplicate (2108183-DUP1) Source: 21H0242-01 Prepared & Analyzed: 08/12/2021										
Turbidity	0.50	0.10	NTU		0.50			0	10	
Duplicate (2108183-DUP2) Source: 21H0370-01 Prepared & Analyzed: 08/12/2021										
Turbidity	0.15	0.10	NTU		0.15			0	10	
Batch 2108204 - SM4500-H+ B										
Duplicate (2108204-DUP1) Source: 21H0290-02 Prepared & Analyzed: 08/13/2021										
pH (pH Units)	7.7		-		7.6			0.9	200	H5
Temperature (°C)	23		-		22			2	200	H5

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108204 - SM4500-H+ B										
Duplicate (2108204-DUP2) Source: 21H0330-01 Prepared & Analyzed: 08/13/2021										
pH (pH Units)	8.0		-		8.0			0.1	200	H5
Temperature (°C)	22		-		22			2	200	H5
Batch 2108236 - SM4500-SiO2 C										
Blank (2108236-BLK1) Prepared & Analyzed: 08/17/2021										
Silica	ND	2.0	mg/L							
LCS (2108236-BS1) Prepared & Analyzed: 08/17/2021										
Silica	8.3	2.0	mg/L	8.000		104	90-110			
LCS Dup (2108236-BSD1) Prepared & Analyzed: 08/17/2021										
Silica	8.3	2.0	mg/L	8.000		103	90-110	0.2	20	
Matrix Spike (2108236-MS1) Source: 21H0290-01 Prepared & Analyzed: 08/17/2021										
Silica	56	10	mg/L	40.00	11	114	85-115			
Matrix Spike Dup (2108236-MSD1) Source: 21H0290-01 Prepared & Analyzed: 08/17/2021										
Silica	55	10	mg/L	40.00	11	112	85-115	2	20	
Batch 2108270 - SM2510 B										
LCS (2108270-BS1) Prepared & Analyzed: 08/18/2021										
Conductivity	140	0.10	µmhos/cm	141.2		102	0-200			
LCS Dup (2108270-BSD1) Prepared & Analyzed: 08/18/2021										
Conductivity	150	0.10	µmhos/cm	141.2		106	0-200	3	200	
Duplicate (2108270-DUP1) Source: 21H0420-01 Prepared & Analyzed: 08/18/2021										
Conductivity	170	0.10	µmhos/cm		170			2	10	
Batch 2108276 - SM2320B										
Blank (2108276-BLK1) Prepared & Analyzed: 08/19/2021										
Alkalinity, Bicarbonate (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Carbonate (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Hydroxide (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Phenolphthalein (As CaCO3)	ND	2.0	mg/L							
Alkalinity, Total (As CaCO3)	ND	2.0	mg/L							
LCS (2108276-BS1) Prepared & Analyzed: 08/19/2021										
Alkalinity, Total (As CaCO3)	240	2.0	mg/L	250.0		98	90-110			
LCS Dup (2108276-BSD1) Prepared & Analyzed: 08/19/2021										
Alkalinity, Total (As CaCO3)	250	2.0	mg/L	250.0		98	90-110	0.8	10	
Matrix Spike (2108276-MS1) Source: 21H0473-09 Prepared & Analyzed: 08/19/2021										
Alkalinity, Total (As CaCO3)	490	2.0	mg/L	250.0	260	93	70-130			
Matrix Spike Dup (2108276-MSD1) Source: 21H0473-09 Prepared & Analyzed: 08/19/2021										
Alkalinity, Total (As CaCO3)	500	2.0	mg/L	250.0	260	95	70-130	1	10	
Batch 2108291 - SM4500-NH3 B,C										

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108291 - SM4500-NH3 B,C										
Blank (2108291-BLK1)				Prepared & Analyzed: 08/19/2021						
Nitrogen, Ammonia (As N)	ND	0.50	mg/L							
LCS (2108291-BS1)				Prepared & Analyzed: 08/19/2021						
Nitrogen, Ammonia (As N)	5.0	0.50	mg/L	5.000		101	90-110			
LCS Dup (2108291-BSD1)				Prepared & Analyzed: 08/19/2021						
Nitrogen, Ammonia (As N)	5.1	0.50	mg/L	5.000		101	90-110	0.4	10	
Matrix Spike (2108291-MS1)				Source: 21H0473-02 Prepared & Analyzed: 08/19/2021						
Nitrogen, Ammonia (As N)	59	5.0	mg/L	50.00	11	97	75-120			
Matrix Spike (2108291-MS2)				Source: 21H0473-13 Prepared & Analyzed: 08/19/2021						
Nitrogen, Ammonia (As N)	73	5.0	mg/L	50.00	26	95	75-120			
Matrix Spike Dup (2108291-MSD1)				Source: 21H0473-02 Prepared & Analyzed: 08/19/2021						
Nitrogen, Ammonia (As N)	60	5.0	mg/L	50.00	11	99	75-120	2	20	
Matrix Spike Dup (2108291-MSD2)				Source: 21H0473-13 Prepared & Analyzed: 08/19/2021						
Nitrogen, Ammonia (As N)	74	5.0	mg/L	50.00	26	96	75-120	0.9	20	

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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108143 - E300.0 (2.1)										
Blank (2108143-BLK1) Prepared & Analyzed: 08/10/2021										
Chloride	ND	1.0	mg/L							
Fluoride	ND	0.50	mg/L							
Nitrogen, Nitrate (As N)	ND	0.50	mg/L							
Nitrogen, Nitrite (As N)	ND	0.10	mg/L							
Phosphorus, Dissolved Orthophosphate (As P)	ND	0.50	mg/L							
Sulfate	ND	5.0	mg/L							
LCS (2108143-BS1) Prepared & Analyzed: 08/10/2021										
Chloride	12	1.0	mg/L	12.50		96	90-110			
Fluoride	1.9	0.50	mg/L	2.000		94	90-110			
Nitrogen, Nitrate (As N)	4.9	0.50	mg/L	5.000		99	90-110			
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		97	90-110			
Phosphorus, Dissolved Orthophosphate (As P)	2.5	0.50	mg/L	2.500		99	90-110			
Sulfate	13	5.0	mg/L	12.50		103	90-110			
LCS Dup (2108143-BSD1) Prepared & Analyzed: 08/10/2021										
Chloride	12	1.0	mg/L	12.50		95	90-110	0.8	10	
Fluoride	1.9	0.50	mg/L	2.000		96	90-110	2	10	
Nitrogen, Nitrate (As N)	5.0	0.50	mg/L	5.000		99	90-110	0.5	10	
Nitrogen, Nitrite (As N)	2.4	0.10	mg/L	2.500		94	90-110	2	10	
Phosphorus, Dissolved Orthophosphate (As P)	2.5	0.50	mg/L	2.500		101	90-110	2	10	
Sulfate	13	5.0	mg/L	12.50		104	90-110	0.7	10	
Matrix Spike (2108143-MS1) Source: 21H0316-01 Prepared: 08/10/2021 Analyzed: 08/11/2021										
Chloride	13	1.0	mg/L	12.50	1.0	93	80-120			
Fluoride	1.9	0.50	mg/L	2.000	0.38	74	80-120			M2
Nitrogen, Nitrate (As N)	6.5	0.50	mg/L	5.000	1.6	99	80-120			
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.088	97	80-120			
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	117	80-120			
Sulfate	16	5.0	mg/L	12.50	6.2	82	80-120			
Matrix Spike (2108143-MS2) Source: 21H0297-01 Prepared: 08/10/2021 Analyzed: 08/20/2021										
Fluoride	1.8	0.50	mg/L	2.000	ND	91	80-120			
Nitrogen, Nitrate (As N)	6.9	0.50	mg/L	5.000	1.6	106	80-120			
Nitrogen, Nitrite (As N)	0.68	0.10	mg/L	2.500	ND	27	80-120			M2
Matrix Spike Dup (2108143-MSD1) Source: 21H0316-01 Prepared: 08/10/2021 Analyzed: 08/11/2021										
Chloride	13	1.0	mg/L	12.50	1.0	92	80-120	0.5	10	
Fluoride	1.9	0.50	mg/L	2.000	0.38	74	80-120	0.3	10	M2
Nitrogen, Nitrate (As N)	6.5	0.50	mg/L	5.000	1.6	98	80-120	0.6	10	
Nitrogen, Nitrite (As N)	2.5	0.10	mg/L	2.500	0.088	97	80-120	0.4	10	
Phosphorus, Dissolved Orthophosphate (As P)	2.9	0.50	mg/L	2.500	ND	115	80-120	1	10	
Sulfate	16	5.0	mg/L	12.50	6.2	81	80-120	0.6	10	

Client: Rosemont Copper Company
Project: Baseline Stormwater Monitoring
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QC Summary

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qual
Batch 2108143 - E300.0 (2.1)										
Matrix Spike Dup (2108143-MSD2)										
		Source: 21H0297-01			Prepared: 08/10/2021 Analyzed: 08/20/2021					
Fluoride	1.8	0.50	mg/L	2.000	ND	92	80-120	0.9	10	
Nitrogen, Nitrate (As N)	7.0	0.50	mg/L	5.000	1.6	107	80-120	0.5	10	
Nitrogen, Nitrite (As N)	0.71	0.10	mg/L	2.500	ND	28	80-120	5	10	M2

Stormwater Monitoring – Existing Conditions – Lab Sheet

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Stormwater Monitoring – Existing Conditions

Frequency: As needed when sampled and when sufficient storm flows occur in washes (Field Parameters)							
Parameter	Units	Analytical Method	Acceptable Detection Limits (at or below the listed value)	Permit Limits / Thresholds			
General Measurements							
Temperature – field	° C (Celsius)	Oakton PC 450 Meter/Oakton pH Con 10 Meter	NA	NA			
pH – field	S.U.	Oakton PC 450 Meter/Oakton pH Con 10 Meter	NA	NA			
Conductivity – field	µS/cm	Oakton PC 450 Meter/Oakton pH Con 10 Meter	NA	NA			

Stormwater Monitoring – Existing Conditions – Lab Sheet

July 1, 2021

Stormwater Monitoring – Existing Conditions (continued)							
Frequency: As needed when sampled and when sufficient storm flows occur in washes (Laboratory Parameters)							
Parameter	Units	Analytical Method	Acceptable Detection Limits (at or below the listed value)	Permit Limits / Thresholds			
General Measurements, General Chemistry							
Temperature – lab	° C	SM 4500 H+B	NA	NA			
pH – lab	S.U.	SM 4500 H+B	NA	NA			
Conductivity – lab	µS/cm	SW-846 9050A	2.0	NA			
Total dissolved solids	mg/L	SM 2540 C	20	NA			
Total suspended solids	mg/L	SM 2540 D	10	NA			
Turbidity	NTU	EPA 180.1	1.0	NA			
Hardness ¹	mg/L	SM 2340B/ calculation	13.0	NA			
Cation/Anion Balance	%	calculation	NA	NA			
Total alkalinity	mg/L	SM 2320 B	4.0	NA			
Bicarbonate	mg/L	SM 2320 B	4.0	NA			
Carbonate	mg/L	SM 2320 B	4.0	NA			
Hydroxide	mg/L	SM 2320 B	4.0	NA			
Sulfate	mg/L	EPA 300.0	0.50	NA			
Chloride	mg/L	EPA 300.0	0.5	NA			
Fluoride	mg/L	EPA 300.0	0.50	NA			
Nitrate (as nitrogen [N])	mg/L	EPA 300.0	0.10	NA			
Nitrite (as N)	mg/L	EPA 300.0	0.10	NA			
Nitrate + Nitrite (as N)	mg/L	EPA 300.0/ calculation	0.10	NA			
Total Nitrogen	mg/L	Total Nitrogen/ calculation	NA	NA			
Total Kjeldahl Nitrogen	mg/L	EPA 351.2	0.50	NA			
Calcium ¹	mg/L	EPA 200.7	2.0	NA			

Stormwater Monitoring – Existing Conditions – Lab Sheet

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Stormwater Monitoring – Existing Conditions (continued)						
Parameter	Units	Analytical Method	Acceptable Detection Limits (at or below the listed value)	Permit Limits / Thresholds		
General Measurements, General Chemistry (continued)						
Magnesium ¹	mg/L	EPA 200.7	2.0	NA		
Sodium ¹	mg/L	EPA 200.7	0.5	NA		
Potassium ¹	mg/L	EPA 200.7	0.5	NA		
Ammonia (as N)	mg/L	SM 4500	0.5	NA		
Orthophosphate (as P)	mg/L	EPA 300.0	0.1	NA		
Silicon Dioxide ¹	mg/L	EPA 200.7	0.214	NA		
Frequency: As needed when sampled and when sufficient storm flows occur in washes (Laboratory Parameters)						
Parameter	Units	Analytical Method	Acceptable Detection Limits (at or below the listed value)	Permit Limits / Thresholds		
Dissolved Metals						
Aluminum	mg/L	EPA 200.7	0.1	NA		
Antimony	mg/L	EPA 200.8	0.001	NA		
Arsenic	mg/L	EPA 200.8	0.0005	NA		
Barium	mg/l	EPA 200.7	0.01	NA		
Beryllium	mg/L	EPA 200.7	0.001	NA		
Boron	mg/L	EPA 200.7	0.05	NA		
Cadmium	mg/L	EPA 200.7	0.001	NA		
Chromium – total ²	mg/L	EPA 200.7	0.01	NA		
Cobalt	mg/l	EPA 200.7	0.01	NA		
Copper	mg/L	EPA 200.7	0.01	NA		
Lead	mg/L	EPA 200.8	0.0005	NA		

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Stormwater Monitoring – Existing Conditions (continued)						
Frequency: As needed when sampled and when sufficient storm flows occur in washes (Laboratory Parameters)						
Parameter	Units	Analytical Method	Acceptable Detection Limits (at or below the listed value)	Permit Limits / Thresholds		
Dissolved Metals (continued)						
Manganese	mg/l	EPA 200.7	0.01	NA		
Mercury	mg/L	EPA 245.1	0.0002	NA		
Molybdenum	mg/l	EPA 200.7	0.01	NA		
Nickel	mg/L	EPA 200.7	0.01	NA		
Selenium	mg/L	EPA 200.8	0.0005	NA		
Silver	mg/L	EPA 200.8	0.0001	NA		
Thallium	mg/L	EPA 200.8	0.0001	NA		
Zinc	mg/L	EPA 200.8	0.013	NA		
Frequency: As needed when sampled and when sufficient storm flows occur in washes (Laboratory Parameters)						
Parameter	Units	Analytical Method	Acceptable Detection Limits (at or below the listed value)	Permit Limits / Thresholds		
Total Recoverable Metals						
Aluminum	mg/L	EPA 200.7	0.1	NA		
Antimony	mg/L	EPA 200.8	0.001	NA		
Arsenic	mg/L	EPA 200.8	0.0005	NA		
Barium	mg/l	EPA 200.7	0.01	NA		
Beryllium	mg/L	EPA 200.7	0.001	NA		
Boron	mg/L	EPA 200.7	0.05	NA		
Cadmium	mg/L	EPA 200.7	0.001	NA		
Chromium - total ²	mg/L	EPA 200.7	0.01	NA		

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Stormwater Monitoring – Existing Conditions (continued)					
Frequency: As needed when sampled whenever sufficient storm flows occur in washes (Laboratory Parameters)					
Parameter	Units	Analytical Method	Acceptable Detection Limits (at or below the listed value)	Permit Limits / Thresholds	
Total Recoverable Metals (continued)					
Cobalt	mg/l	EPA 200.7	0.01	NA	
Copper	mg/L	EPA 200.7	0.01	NA	
Iron	mg/L	EPA 200.7	0.1	NA	
Lead	mg/L	EPA 200.8	0.0005	NA	
Manganese	mg/L	EPA 200.7	0.01	NA	
Mercury	mg/L	EPA 245.1	0.0002	NA	
Molybdenum	mg/l	EPA 200.7	0.01	NA	
Nickel	mg/L	EPA 200.7	0.01	NA	
Selenium	mg/L	EPA 200.8	0.0005	NA	
Silver	mg/L	EPA 200.8	0.0001	NA	
Thallium	mg/L	EPA 200.8	0.0001	NA	
Uranium	mg/L	EPA 200.8	0.0001	NA	
Zinc	mg/L	EPA 200.8	0.013	NA	

Units: S.U. = standard units

µS/cm = micro Siemens per centimeter

mg/L = milligrams per liter

µg/L = micrograms per liter

NA = not applicable

NNS = no numeric standard

¹: Parameter to be analyzed as both dissolved and total.

² : Stormwater samples will be analyzed for total Chromium but the results will be compared to Chromium III (since there is currently no lab method for Cr III). Numeric standard listed in Table B-1 is for Chromium III.